



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,955	12/30/2004	Kasper Kokkonen	4819-4735	7370
27123	7590	03/31/2008		
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			EXAMINER YANG, JIE	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 03/31/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com  
Shopkins@Morganfinnegan.com  
jmedina@Morganfinnegan.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,955	<b>Applicant(s)</b> KOKKONEN ET AL.	
	<b>Examiner</b> JIE YANG	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 14-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 14-18 have been withdrawn, claims 6, 8, 10, and 11 are amended from original claims. Claims 1-13 are pending in application.

#### ***Status of the Precious Rejection***

The previous rejection of claims 1-6, 9-13 under 35 U.S.C. 103 (a) as being unpatentable over Ikoma et al (US 5,685,892, thereafter US'892) is maintained. The amendments in claims 6, 10 and 11 have been addressed as following.

The previous rejection of claims 7 and 8 under 35 U.S.C. 103 (a) as being unpatentable over US'892 and evidenced by Murakami et al (US, 4,578,977, thereafter US'977) is maintained. The amendment in claim 8 has been addressed as following.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikoma et al (US 5,685,892, thereafter US'892).

US'892 is applied to the claims 1-6, and 9-13, for the same reason as stated in the previous rejection dated 10/04/2007.

The amendments in the amended claims do not change the scope of the initial claims.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over '892 and evidenced by Murakami et al (US, 4,578,977, thereafter US'977).

US '892 in view US'977 is applied to the claims 7 and 8, for the same reason as stated in the previous rejection dated 10/04/2007.

The amendments in the amended claims do not change the scope of the initial claims.

### ***Response to Arguments***

Applicant's arguments filed on 12/27/2007 with respect to claims 1-13 have been fully considered but they are not persuasive.

Applicant's arguments are summarized as follows:

1, Ikoma discloses the bend anode reaching the melt in a vertical position and changes its posture gradually to a horizontal position after reaching the melt. Contrary to Ikoma, independent claim 1 requires that the "bend anode meets the surface of a melt contained in a smelting reactor in an essentially horizontal position". Ikoma fails to teach or render obvious to this element of claim 1; and

2, claim 1 requires that the anode be an "essentially complexly bend anode," whereas Ikoma discloses an anode with only the leading end bent.

**Responses are as follows:**

Regarding argument 1, "bend anode meets the surface of a melt contained in a smelting reactor in an essentially horizontal position" is a combination result of anode bending, angle of chute-sloping channel, and arrangement of jump rail. US'892 teaches the similar chute sloping channel, jump rail, and bending anode for the same application: feeding an anode into a metallurgical smelting reactor while avoiding anodes impinging against the furnace bottom (Col.7, line 48-59 of '892) as recited in the instant invention. US'892 teaches: "i(I)n the foregoing, the charging step may comprise turning the anode scrap in a vertical plane to increase resistance to be exerted by the melt on the anode scrap to such an extent that the anode scrap does not directly travel to the furnace bottom on charging" (Col.2, lines 50-54 of US'892), and US'892 further teaches: "i(I)n this case, it is preferable that the anode scrap be turned such that when the anode scrap reaches the melt in the metallurgical furnace, the anode furnace is brought into a generally horizontal posture. Furthermore, the charging step may

Art Unit: 1793

comprise bending the leading end of the anode scrap in such a direction that when the anode scrap is introduced in the metallurgical furnace, a bent portion is directed upwards with respect to a direction of introduction of the anode scrap" (Col.2, lines 54-62 of US'892). Therefore, claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ikoma et al (US'892) is proper.

Regarding argument 2, as pointed out in the previous office action marked 10/04/2007, the bending angle/radius of curvature is a result-effective variable in term of feeding result, which is evidenced by US'892 (Col.8, lines 26-33 of US'892). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the bending angle or radius of curvature as demonstrated in US'892, for example, obtaining "essentially complexly bend anode," as recited in the instant claim 1. SEE MPEP 2144.05 II. Therefore, the rejection of claim 1 under the ground of 35 U.S.C. 103(a) as being unpatentable over US'892 is proper.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-270-1884. The examiner can normally be reached on M-F, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY

/Roy King/

Supervisory Patent Examiner, Art Unit 1793